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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/923,213	08/06/2001	Lynn Henry Wheeler	10399-34384	8986

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EXAMINER
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PYZOCHA, MICHAEL J

ART UNIT	PAPER NUMBER
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2137

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/27/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

09/923,213

Applicant(s)

WHEELER ET AL.

Examiner

Michael Pyzocha

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 21-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 21-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

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**DETAILED ACTION**

1. In view of the Appeal Brief filed on 12/28/2006, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

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The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-5 and 21-31 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. Manufacturing steps are critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). Claim 1 discloses a method of manufacturing devices, however, there are no manufacturing steps to warrant a method of manufacturing. At most steps a-c of claim 1 recites a method for initializing a device that is already manufactured.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-5 and 21-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claim 1 recites "a method of manufacturing devices" that is indefinite and unclear. It is not clear how or if these devices are manufactured based on the claimed limitations following the above-mentioned phrase because, as put forth above, there are not steps related to manufacturing and at most related to initializing a device.

Claim 1 also recites the private key is "stored within the device against the possibility of divulgement thereof by the device". It is unclear how a key can be stored without the device being able to divulge the key because there are many ways of determining a key outside of a device, whether it is some sort of ciphertext attack or physical tampering of the device or merely an administrator commanding the device to output the key in clear text. Therefore it is unclear how the key can be stored "against the possibility of divulgement".

6. Any claims not specifically addressed are rejected by virtue of their dependencies.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1-5, 21, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer (US 5422953) in view of Rosen (US 5557518).

As per claim 1, Fischer discloses a method of manufacturing devices that generate digital signatures such that each device may be reliably and uniquely identified, comprising the steps of: a. creating a public-private key pair within the secure environment, the private key for utilization in generating a digital signature for an electronic message, the public key exportable for use by third parties in connection with authenticating the electronic message (see column 4 lines 23-34 and Fig 2); b. storing the private key within the device against the possibility of divulgement thereof by the device (see column 3 lines 31-38); and c. linking the public key with other information by storing the public key and the other information in a database (see column 2 lines 19-37 and column 6 lines 10-65).

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Fischer fails to explicitly disclose that the device is manufactured in a secure environment and that the database is securely linked within the secure environment.

However, Rosen teaches manufacturing a device in a secure environment (see column 11 lines 6-13) and a database containing linked information within a secure environment (see column 10 lines 56-67 and Figure 5).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to manufacture the device of Fischer in a secure environment and for the secure database to be within the secure environment.

Motivation to do so would have been to guarantee the protocols and physical protection of each device (see column 11 lines 6-13) and to provide trusted certificates to the trusted devices (see column 10 lines 56-67).

As per claims 2-3, the modified Fischer and Rosen system discloses each public-private key pair is created within each device based on a random number produced by a random number generator disposed within each device and each digital signature generated by each device is a random number (see Rosen column 9 lines 54-66).

As per claim 4, the modified Fischer and Rosen system discloses the other information comprises respective security

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features and a manufacturing history of each device (see Fischer column 6 lines 10-65 and Rosen Figure 34 and respective description).

As per claim 5, the modified Fischer and Rosen system discloses identifying a particular manufactured device by authentication a message using one of said linked public keys, a digital signature for the message having been generated by the particular manufactured device (see Fischer column 7 lines 20-34).

As per claim 21, the modified Fischer and Rosen system discloses the public key and information linked therewith is obtained from a secure entity (see Fischer column 4 lines 29-34 and Rosen column 10 lines 56-67).

As per claim 25, the modified Fischer and Rosen system discloses the public key and the other information stored in the database for each user further includes user-specific information (see Fischer column 2 lines 19-37).

9. Claims 22-24 and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over the modified Fischer and Rosen system in view of Ramasubramani (US 6233577).

As per claim 22, the modified Fischer and Rosen system fails to disclose the other information stored in the database includes the identity of a plurality of third-parties with which



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an account is maintained, the accounts being identified by one of a plurality of third-party account identifiers.

However, Ramasubramani teaches a system in which certificates are stored and maintained for a plurality of third-parties in a centralized database, the accounts being identified by one of a plurality of third-party account identifiers (see Figure 4B).

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to combine the ideas of Ramasubramani with those of the modified Fischer and Rosen system because doing so makes the system more robust and efficient by allowing for centralized storage and retrieval of certificates for a plurality of users.

As per claims 23-24 and 27-28, the modified Fischer, Rosen, and Ramasubramani system discloses the public key linked account information of the users is indexed in the database by unique account identifiers such that the public key linked account information for a user is retrieval from the database based on the account identifier (see Ramasubramani Fig 4B).

10. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over the modified Fischer and Rosen system in view of Schneier (Schneier, Bruce. Applied Cryptography. John Wiley & Sons. 1996. pages 185-187).

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As per claim 26, the modified Fischer and Rosen system fails to disclose the user-specific information includes the name and address of the user.

However, Schneier discloses the well-known idea that a certificate may disclose the name and address of a user (see page 186).

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to combine the ideas of Schneier with the modified Fischer and Rosen system and include the name and address of a user for further identification purposes.

11. Claims 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over the modified Fischer and Rosen system in view of Menezes (Menezes, Alfred J. Handbook of Applied Cryptography. CRC Press. 1997. pages 25-32; 546-548; 572-577).

As per claim 29, the modified Fischer and Rosen system discloses a) receiving an EC, the EC including an account identifier and a message including the new public key and a digital signature therefor (see Fischer column 2 lines 19-37); but fails to disclose authenticating the message of the EC using the public key associated with the account in the database identified by the account identifier, and upon successful

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authentication thereof; c) sending an EC to each of the third-parties, each EC including the new public-key and the third-party account identifier for the respective third-party maintained in the database and associated with the account identified by the account identifier.

However, Menezes discloses authenticating the message of the EC using the public key associated with the account in the database identified by the account identifier, and upon successful authentication thereof (see pages 25-26); c) sending an EC to each of the third-parties, each EC including the new public-key and the third-party account identifier for the respective third-party maintained in the database and associated with the account identified by the account identifier (see page 576).

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to combine the ideas of Menezes with those of the modified Fischer and Rosen system because doing so provides a number of benefits to the system, including making the system more robust and secure by providing for authentication of a user message.

As per claim 30, the modified Fischer, Rosen and Menezes system discloses the step of digitally signing a message

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involving the new public key of the user and a third-party account identifier (see Fischer column 2 lines 19-37).

As per claim 31, the modified Fischer, Rosen and Menezes system discloses the step of sending the EC received from the user to each of the third-parties (see Menezes page 576).

### **Double Patenting**

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-5 and 21-31 of the instant application are rejected by U.S. Patent No. 6,915,430, U.S. Patent No. 6,892,302, and copending U.S. Patent Application No. 10/248,626. A discussion of how independent claim 1 is met by each of the four cases is cited below. The examiner notes that the

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dependent claims are met by the four cases as well but haven't been specifically discussed for the sake of brevity.

Claims 17 of U.S. Patent No. 6,915,430 contains every element of claim 1 of the instant application and as such anticipates claim 1 of the instant application. Claim 18 of U.S. Patent No. 6,892,302 contains every element of claim 1 of the instant application and as such anticipates claim 1 of the instant application. Claim 28 of copending U.S. Patent No. 7,047,414 contains every element of claim 1 of the instant application and as such anticipates claim 1 of the instant application.

"A later patent claim is not patentably distinct from an earlier patent claim if the later claim is obvious over, or anticipated by, the earlier claim. In re Longi, 759 F.2d at 896, 225 USPQ at 651 (affirming a holding of obviousness-type double patenting because the claims at issue were obvious over claims in four prior art patents); In re Berg, 140 F.3d at 1437, 46 USPQ2d at 1233 (Fed. Cir. 1998) (affirming a holding of obviousness-type double patenting where a patent application claim to a genus is anticipated by a patent claim to a species within that genus)." *Eli Lilly and Company v Barr Laboratories, Inc.*, United States Court of Appeals for the Federal Circuit, On Petition for Rehearing en Banc (Decided: May 30, 2001).

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NOTE: The double patenting rejection under application 10/248,629 (now US 6959381) has been withdrawn based on applicant's remarks.

Examiner also thanks applicant for indicating a willingness to file a terminal disclaimer upon allowance of claims in the present application.

#### ***Response to Arguments***

12. Applicant's arguments with respect to claims 1-5 and 21-31 have been considered but are moot in view of the new ground(s) of rejection.

It is noted that Applicant attempted to overcome the previous rejections by stating the present application is directed to AADS (as opposed to CADs) and that digital certificates are not needed in such a system. However, the claims do not reflect these statements; although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

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**Conclusion**

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Chess et al. and Silverbrook et al. teach methods of manufacturing devices in a secure environment.

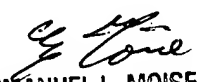
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Pyzocha whose telephone number is (571) 272-3875. The examiner can normally be reached on 7:00am - 4:30pm first Fridays of the bi-week off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MJP

  
EMMANUEL L. MOISE  
SUPERVISORY PATENT EXAMINER